

Rules & Procedures**

GRANT-IN-AID SCHEME ARMAMENT RESEARCH BOARD

Armament F YgYUfW '6cUfX

Defence Research & Development Organisation

Ministry of Defence

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(** The procedures are under revision. A common SOP for all the research boards and ER & IPR is under approval and the same will replace these existing procedures.)

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1.0 ARMAMENT RESEARCH BOARD

1.1 INTRODUCTION

DRDO is devoted to the design and development of state-of-the-art and futuristic defence systems. It has chain of over 50 laboratories all over the country, covering a wide spectrum of disciplines. It has endeavoured to undertake and pursue research in various scientific fields in pursuit of acquiring self-sufficiency in critical technologies needed for design and development of world-class equipment/systems. It has been collaborating with various academic institutions, R&D organizations and industries for achieving this objective.

DRDO has constituted four research boards apart from Dte of ER & IPR to promote innovative/basic research in scientific fields useful for defence applications and nurture talent available in academic institutions, universities, R & D centers and industries. These Boards are Aeronautics Research & Development Board (ARDB), Naval Research Board (NRB), Life Sciences Research Board (LSRB) and Armament Research Board (ARMREB). Armament Research Board was constituted vide Govt of India, Ministry of Defence letter No. ARM (RD-17)/2035 /1008 /D (R&D) dated 18/21 Mar 1997 in 1997 for promoting innovative research in scientific fields useful for armament discipline. The board was constituted under Directorate of Armaments, one of the directorates in DRDO HQrs which had its origins in the Inspectorate of Armaments whose existence dates back to the Second World War. The inspectorate was renamed as the Directorate of Armaments in mid 1950s. Directorate of Armaments is coordinating the work pertaining to armament group of laboratories viz. ARDE, CFEES, HEMRL, TBRL and PXE.

The board was set up to enhance the intellectual inputs, physical infrastructure and scientific understanding in the field of armaments to meet the future challenges. Armament being a complex multi-disciplinary field involves ballistics & aerodynamics, materials & metallurgy, mechanical & electronic engineering, opto-electronics & computer techniques, explosives & pyrotechnics, modelling, simulation and system analyses, etc. Five research panels viz. Combustion, Detonics & Shock Waves (CDSW), Armament Design Mechanism & Ballistics (ADMB), High Energy Materials (HEM), Materials for Armament Applications (MAA) & Armament Sensors and Electronics (ASE), covering the entire spectrum of armament discipline, are operating under the Board to make its functioning more effective.

1.2 VISION

Enlarge the scientific community in the Armament discipline by harnessing and nurturing research talent available in the academic & research institutions and to develop expertise and technologies in the field of Armaments to meet the national needs of Defence and security.

1.3 MISSION

Enhance the intellectual level, physical infrastructure and scientific understanding in the field of Armaments to meet the future challenges of defence and national security.

1.4 OBJECTIVES OF ARMREB

- To foster knowledge-based growth of armament discipline in the country, strengthening and integrating national resources of knowledge, know how, experience, facilities and infrastructure
- To catalyze the much needed cross-fertilization of ideas and experiences between defence and non-defence experts in scientific and technical fields that contribute to armament technology
- To launch and coordinate research in specified areas of armament discipline in academic institutions
- To create conditions suitable for attracting talent through research collaborations and other academic exchanges.
- To adopt synergic approach towards national needs and priorities in the field of armaments, keeping in view the global advancements, in order to develop competence in key areas
- To help in creating self-sufficiency in critical technologies needed for development of competitive armament stores and put the armament discipline in the forefront in global scenario
- To lead to technological innovations useful for short and long term combat multiplier

1.5 CHARTER OF ARMREB

- To support basic research applicable to armament discipline
- To set principles and practices governing the relationship of DRDO with the academic world
- To consider and get approval by peer evaluation, research proposals submitted to ARMREB
- To set funding pattern and funding methodology for the research panels of ARMREB
- To decide on specific research programmes of individual projects exceeding Rs 25 lakhs or involving major civil works
- ARMREB will exclude funding of development of system hardware.

1.6 COMPOSITION OF VARIOUS PANELS UNDER ARMREB

Chairman ARMREB- Dr. SK Salwan			
Panel	Chairman	Co-ordinator	
High Energy Materials (HEM) """	"Uj tk'R'Xgpwi qr crcp	Dr. Uggo c'Menef g	
	Former Director FTFL	HEMRL, Pune	
		memef gauggo c@{cj qq@eqo	
Armament Sensors &	Prof'MI qr cmvo ct	Ms VS Tamhankar	
Electronics (ASE)	IISc Bangalore	ARDE, Pune	
		vstamhankar@arde.drdo.ir	
Combustion, Detonics & Shock	Prof K Ramamurthy	A C Sharma	
Waves (CDSW)	IIT Chennai	TBRL,Chandigarh	
		acsharma@tbrl.drdo.in	

Materials for Armament	Prof GVS Sastry	Dr. B Praveen Kumar
Applications (MAA)	IT BHU, Varanasi	ARDE, Pune
		praveenb406@gmail.com
Armament Design Mechanism	Dr. B Sivasubramonian	Shri S Harikrishnan
& Ballistics (ADMB)	Group Dir (STAG), VSSC,	ARDE, Pune
	Thiruvananthpuram	harikrishnans@hotmail.com

1.7 RESPONSIBILITIES OF VARIOUS PANELS UNDER ARMREB

- To identify and rope in the prospective institutions for collaborative research work in defence related areas.
- To promote research activities leading to the growth of armament technologies for the present and future needs.
- To scrutinize project proposals and make specific recommendations to ARMREB.
- To monitor, evaluate and guide the sanctioned projects/schemes at suitable intervals and to make recommendations to the ARMREB.
- To identify gaps in R&D efforts and recommend methods for bridging them in the best manner.
- To provide financial support for various other activities such as symposia/seminars/workshops, publications of books & participation in the international conferences.
- To organize workshop/seminar in the specialized fields related to the panel for better interaction with academic institutions/R & D establishments/industries etc.
- To create data base on specific and allied subjects related to the panel.

2.0 GRANTS-IN-AID SCHEME

2.1 PURPOSE OF SCHEME

ARMREB has instituted a "**Grants-in-Aid**" scheme to harness and nurture the research talent available in academic institutions. Under this scheme, grants are offered to research organizations/universities/departments/laboratories/ industries for research in basic sciences and engineering, setting up basic facilities/infrastructures and conduct of seminars/symposia/ workshops etc.

2.2 SCOPE OF THE GRANT

The grant will be utilised for:

- a) Meeting salary of research and laboratory staff, specially recruited for the project/facility and to meet cost of their medical benefits, Contributory Provident Fund (CPF), leave etc. on the same scale as applicable to the equivalent regular employees of the Institution and for providing funds to the extent of 15% of the total cost of the project as benefit to host institutions for meeting the cost of overhead expenses with upper ceiling of Rs 5.0 lakh, including infrastructure facilities.
- b) Procuring special equipments, consumable stores, chemicals etc or for obtaining special services not normally provided by the institution such as calibration and testing of equipment and sub-systems, fabrication of components within workshop of the institution, etc.

- c) Meeting cost of setting up of basic facilities/infrastructure for research in the field of armament technologies.
- d) Conducting or sponsoring conferences/workshops/ seminars/symposia/ short courses etc and for providing funds for training of manpower, promotional activities and deputations within the country and abroad for the project related activities.
- e) Covering contingency expenses viz. postage, stationary, typing, printing, expenses on part-time/ full time typists/data entry operator on computers for the work related to the project, if required.
- f) Meeting travel expenses in India for project related activities, symposia/ seminar/short courses etc. and for deputation abroad in connection with presentation of papers in international symposia on project related work or seeking new advances of collaboration.
- g) Meeting-expenses in India for eminent scientists invited by the ARMREB.
- h) Publishing research work in the form of a technical report for dissemination to armament community in an approved ARMREB format.
- i) Meeting expenditure for honorarium to invited speakers for ARMREB sponsored short courses/workshops.

2.3 PROCEDURE FOR SANCTION OF PROJECTS

PFC/ARMREB-01

R& D project proposal to be formed out under this scheme originate as follows:

- Projects of interest to national needs formulated by the ARMREB are referred to academic institutions/R&D organisations and industry etc.
- Proposals for Research, design and development in the field of armaments may be submitted by the academic institutions/R&D organisations and industry etc.
- Proposals for projects involving storage handling and usage of explosives by establishments other than defence establishments would be scrutinized and sanctioned in accordance with guidelines stipulated at para 9.

Activity	Process	Time (Cumulative) in Days
Application	 The Principal Investigator will submit 3 hard copies of project proposals and soft copy along with undertaking from the grantee institution/organisation that it has not obtained or applied for grants for the same purpose or activity from any other ministry/department of Govt. of India or state govt. along with certificate to the effect that basic facilities and faculty/research staff with the relevant technical background for the work are available, in prescribed format (FM/ARMREB-01) to the Secretary ARMREB. It is also required to include the details of Co-PI. In addition to this a declaration whether the work will be carried out at their institution or will be shared by more than one institution shall be submitted along with the proposal. In 	0 (0)

	such a case the institute applying for the grant shall act as Principal Investigator and other work centres as investigators. Monitoring and timely completion of the task with the investigators shall be the sole responsibility of the Principal Investigator.	
Scrutiny	 Proposal will be forwarded to the Coordinator to obtain comments of the panel members on technical as well as financial aspect of the proposal. Panel Coordinator will also forward a copy to panel Chairman. In case of multidisciplinary nature of proposal an adhoc committee/special panel will be constituted by Secretary ARMREB on approval of CC R&D/DG (Armts). The committee under Chairmanship of renowned academician/researcher consisting of at least 4 members of appropriate specialization/experience and Secretary ARMREB as member to review the proposal. 	10 (10)
	• The panel members will analyze the proposal (FM/ARMREB-	20 (30)
	 O2) and give their comments to Panel Chairman. Panel Chairman will review the comments and forward consolidated views of panel to Panel Coordinator. Panel Coordinator will obtain the in-principle approval of the User Lab Director along with nomination of user group Scientist with his comments on utility of the project. In case, any suggestion made by the Panel Chairman/members and User Lab Director, the Panel Coordinator send back the proposal to PI for incorporating the suggestions/ recommendations. PI submits the revised proposal to Panel Coordinator who further sends it to Panel Chairman. Panel Chairman recommends for sanction. If required he sends the proposal to panel members for their comments and compile 	05 (35)
	 their recommendations. Recommendation of Chairman along with one hard copy of the revised proposal (in case, revision suggested by panel should be verified by panel Coordinator that suggestions of the panel have been incorporated) to be sent to Secretary ARMREB by the panel Coordinator with recommendation of User Lab Director alongwith nomination of user group scientist to follow-up the project. E-communication to be adopted. 	10(45)

Processing for Approval	 Proposal will be processed by Secretary ARMREB for sanction as per the following financial power (PFC-05) Project cost upto 15 lakh Secretary ARMREB with concurrence of IFA(R&D) Project cost Rs 15 lakh to 1 Cr CC(R&D)/DG (Armaments) with concurrence of IFA(R&D) Project cost between Rs 1 Cr to 3 Cr DG/Chairman DRDO with concurrence of IFA(R&D) Project cost between Rs 3 Cr to 5 Cr Secy Defence(R&D) with concurrence of Addl(FA) Project cost between Rs 5 Cr to 10 Cr Secy Defence(R&D) with concurrence of FA(DS)/Secy Def(Fin) 	10 (55)
Sanction and release of funds	 Secretary ARMREB will intimate PI for submission of the following documents to process the case for issue of sanction letter and release of funds: Contingent Bill for 1st instalment (FM/ARMREB-03) ECS Mandate (FM/ARMREB-04) Executive Bond - MOC/MOU (in prescribed format) If any special equipment asked under project, an undertaking to be submitted by the institute that the equipment is not available with the Institution and extensively required for the project work. Undertaking that grant has not been obtained or applied for the same purpose or activity from any other Ministry/Department of Government of India or state government. Funding Pattern of the Institute Article of Association and Bye-laws of the Grantee Institution/Organisation PI will submit the above documents to the Secretary ARMREB. Secretary ARMREB will review the documents, issue the formal sanction letter and forward bill to PCDA for payment. 	5 (60) 10 (70) 5 (75)
	• PCDA, as per the payment milestones mentioned in the documents, will transfer the installment to institute under intimation to Secretary ARMREB.	15 (90)
Execution	 After receiving the first instalment, the PI will communicate to Secretary ARMREB & PCDA (R&D) regarding receipt of installment. Date of receipt of 1st installment will be reckoned as commencement of the project. Work will be executed under MOU/MOC. PI will submit progress report to facilitate the following reviews to monitor progress/mid-course correction (refer Annexure I, guidelines for project review) Monthly review by the user group scientist. Quartly/Half yearly review by the respective panel. 	Based on PDC

Half yearly/Annual review by ARMREB during Board meeting (If project cost > 15 lakhs) • Contingent bill (FM/ARMREB-03), statement of accounts, expenditure and utilisation certificate (FM/ARMREB-05) duly certified by executive authority of the institution and countersigned by local audit authority along with annual progress report (FM/ARMREB-04) by end of each financial year will be submitted to Secretary ARMREB to forward it to PCDA. • PCDA will release the subsequent installments based on the recommendation of panel. • The above process will be repeated till the final instalment is • On completion of project, a meeting will be arranged by PI in 60 days of Closure consultation with respective Panel Chairman & scientist of the completion/ user lab for final review, recommendations of the Chairman closure/ and dissemination of the research work. termination • During final review if it is found that objectives of the project of the are achieved, the project is recommended for closure or project extension is granted. If the objectives are not achieved completely, project can also be closed in later case, if panel decides. • The PI will submit the final closure documents in the prescribed formats of ARMREB within 60 days of completion/closure/ termination of the project as per check list. It also includes the settlement of accounts. • Check List: 1. Technical report giving know how and design documents etc. -10 hard copies, 1 soft copy 2. Executive summary in prescribed format (FM/ARMREB-07) of ARMREB-10 copies 3. Audited Statement of accounts. expenditure utilisation certificate prescribed format in (FM/ARMREB-05) -02 copies 4. List of equipments purchased under project in the format GFR-19 duly countersigned by Audit - 02 copies 5. Request for retention of equipment purchased from the project fund for further R & D work may be considered on recommendation of the panel. In case of retention of equipment, an undertaking duly countersigned by HOD/CFA to be submitted authorising DRDO to utilize the facility/equipment free of cost. 6. Unutilised funds, if any to be refunded by demand draft in favour of PCDA (R&D) drawn at New Delhi or refunded by MRO in prescribed format (FM/ARMREB-12).

- 7. Certificate from PI and endorsement by user group scientist of the Lab that objectives have been realised.
- Copies of closure reports are to be sent to user laboratories for dissemination of research work and further follow-up.
- All accounts maintained by the institute / R&D organisation / industry progressing the
 project/scheme will be subject to audit by their respective auditors. On completion /
 termination of the project, accounts for the entire project / scheme duly audited by the
 auditors shall be submitted and the unspent balance, if any, from the sanctioned funds
 will be refunded to PCDA under intimation to Secy ARMREB.
- During the progress of the projects, The institute concerned will provide all facilities to the scientists of the Defence Research & Development Organisation- (DRDO) / Members of research Panel / ARMREB for visiting the institute for ensuring timely achievements of the objectives of the projects / schemes. TA/DA of the non official panel member/expert will be claimed under the project head as per the norms of ARMREB.
- The investigator(s) may visit concerned DRDO lab / establishment within the country for consultations, attending symposia / seminar etc provided such visits are of direct relevance to the project. TA/DA would be claimed from project head. Such visits will be reported in the annual progress report of the project submitted to Secy ARMREB.
- Evaluation of the products / processes developed under Grants-in-Aid projects/ schemes will be carried out by the respective research panel of ARMREB. The TA / DA of the non DRDO panel members could also be paid out of the TA/DA budget of the project/scheme as per the entitlement of the panel member by the grantee Institution.
- In case the project reaches a significant stage or achieves a major breakthrough/milestone a technical report shall be submitted which must reach the project review board before the annual meeting. The standardised format for preparation of technical report is as follows:

ARMREB-RP-TR-PN-RN/YY, where

RP - Name of the Research Panel (abbreviated)

TR - Technical Report

PN - Project Number

RN - Technical Report No.

YY - Year.

Technical reports will be generated in A4 size with attached drawings/process/know how etc appropriately folded to come in A4 size. A document sheet, as per FM/ARMREB-06 is to be enclosed along with the technical report.

2.4 PROCEDURE FOR SANCTION OF GRANTS FOR CONDUCT OF NATIONAL /INTERNATIONAL - SEMINAR/ SYMPOSIA/ WORKSHOP/ COURSES ETC.

PFC/ARMREB-02

Armament Research Board will also receive proposals for financial support for conduct of symposia/seminars/workshops/courses etc. Such proposals which are of the interest of promotion of research in the field of armament and training of specialised manpower will be supported by ARMREB to the extent possible subject to review and recommendation of relevant panel. Sanction would be governed as per the policy issued and revised time to time by ARMREB.

Activity	Process	Time
		(Cumulative) in Days
Application	•The institute or organizing agency will submit 3 hard copies of proposal along with soft copy (at least 3 months in advance	0 (0)
	for National and 5 months in advance for International) in prescribed format (FM/ARMREB-08) to the Secretary	
	ARMREB along with undertaking that financial support has not been asked from any other agency of DRDO.	
Scrutiny	• Secretary ARMREB scrutinizes the proposal and will forward the same to respective panel Coordinator to obtain comments of the panel.	10 (10)
	• The Coordinator will forward the proposal to panel Members with copy to Chairman.	5 (15)
	• The panel members will analyze the proposal and give their comments to Panel Chairman.	15 (30)
	 Panel Chairman will review the comments and forward consolidated views to Coordinator. 	5 (35)
Approval	• Panel Coordinator will forward the proposal along with recommendations for approval to Secretary ARMREB.	5 (40)
Sanction	 Secretary ARMREB will submit the proposal for financial sanction as per process flow chart no. 05 after confirmation by other research Boards and Dte of ER & IPR that sanction has not be made by them for this purpose. After receiving the financial sanction Secretary ARMREB issues a sanction letter to the institute and ask to submit the following documents to process the case for release of funds- Contingent Bill (FM/ARMREB-03) ECS Mandate (FM/ARMREB-04) Undertaking regarding financial support has not been asked from any other agency of DRDO Funding Pattern of the Institute 	10 (50)

	Article of Association of the Institute	10 (60)
	• Institute will submit the above documents to the Secretary ARMREB.	` ,
	• Secretary ARMREB will review the documents and forward it	10 (70)
	to PCDA (R&D) after approval of CFA. • PCDA (R&D) will transfer the grant to institute under intimation to Secretary ARMREB.	15 (85)
Settlement	•On conclusion of the proposed symposia/seminar/workshop /course, the institute will render a comprehensive report	Within 60 days of
Accounts	including the technical documents (proceedings, CDs) related to the concerned activity along with the certificate that the objectives of the activity have been met along with statement	conclusion of the activity
	of account and utilization certificate to Secretary ARMREB.	

2.5 PROCEDURE FOR INVITING EMINENT SCIENTISTS/ ENGINEERS FROM ABROAD TO PARTICIPATE/SHARE KNOWLEDGE VIA CONFERENCES/ SYMPOSIA/SEMINAR/WORKSHOP ETC. IN INDIA

PFC/ARMREB-03

Armament Research Board will also receive proposals 3 months in advance for financial support to invite eminent scientists/engineers from abroad to attend conferences/symposia/seminar/workshop training/consultancy etc. in India. The proposal should bring out the professional background of the invitee and his contribution/achievements in his field of specialisation. The relevance of the invitation to the identified gaps in technology and benefits accruing to our country in terms of our programmes. In case any visits to defence laboratories is also envisaged this should be specifically stated so as to obtain necessary security clearance.

Activity	Process	Time
		(Cumulative)
		in Days
Application	• The institute will submit the proposal (3 hard copies +soft copy) to Secretary ARMREB 3 month in advance along with undertaking regarding financial support has not be asked from any other agency of DRDO.	0 (0)
Scrutiny	 Proposal will be sent to Panel Coordinator for comments/views of the panel. 	10 (10)
	 Coordinator will forward the same to the panel members for comments/views/recommendations. Coordinator will also forward a copy to panel Chairman. 	05 (15)
	• The panel members will analyze the proposal and forward their comments to Panel Chairman who will review it and forward to Coordinator.	15 (30)
Approval	• Panel Coordinator/adhoc committee forwards the proposal along with recommendations for approval to Secretary ARMREB.	10 (40)

Sanction	 Secretary ARMREB issues a sanction letter to institute after confirmation by other research Boards and Dte of ER & IPR that sanction has not be made by them for this purpose. Subsequently, Secretary ARMREB will obtain approval of CFA and ask Convener to submit the following documents— Contingent Bill (FM/ARMREB-03) ECS Mandate Funding Pattern of the Institute Article of Association Hadatabilization financial was at large and the sanctable an	15 (55)
	 Undertaking regarding financial support has not be asked from any other agency of DRDO Institute will submit the documents to the Secretary ARMREB. Secretary ARMREB will review the documents and forward it to PCDA. PCDA will transfer the grant to institute and intimate the release of payment to Secretary ARMREB. 	10 (65) 10 (75) 15 (90)
Settlement of Accounts	• On conclusion of the proposed symposia / seminar / workshop / course, the Institute will render a comprehensive report including the technical documents (proceedings, CDs) related to the concerned activity along with the certificate that the objectives of inviting eminent scientists/ engineers from abroad have been met and submit to Secretary ARMREB. It also includes the settlement of accounts within sixty days after conclusion of the activity.	60 days after conclusion of the activity

2.6 PROCEDURE FOR SANCTION OF GRANTS FOR DEPUTATION ABROAD PFC/ARMREB-04

Armament Research Board will receive proposals for Grants-in-Aid for partially (fully in very exceptional cases) meeting the cost of deputation of researchers to abroad for presenting papers in international symposia/visit to advanced armament R&D facilities/expert advise/attending short courses for the projects supported under ARMREB.

In case the proposed deputation is not related to any ARMREB supported project scheme, but has importance/relevance to field of armaments, the proposals would be submitted to the Armament Research Board. The board will consider the proposals on case to case basis in consultation with Integrated Finance and financial sanction will be intimated by Secy ARMREB.

Activity	Process	Time
		(Cumulative) in Days
Application	• The institute will submit the proposal (3 hard copies +soft copy) in prescribed format (FM/ARMREB-09) to the Secretary ARMREB at least 5 months in advance along with an undertaking regarding financial support has not be asked from any other agency of DRDO.	, ,

C a.m4:	• Cogretory ADMDED will complinize the proposal and former	10 (10)
Scrutiny	 Secretary ARMREB will scrutinize the proposal and forward to the respective panel coordinator to obtain comments/ 	10 (10)
	<u> </u>	
	recommendations of the panel.	
	• The panel members will analyze the proposal and give their comments to Panel Chairman.	20 (30)
	• Panel Chairman will review the comments and forward	10 (40)
	consolidated views to Panel Coordinator.	10 (40)
Approval	• Panel Coordinator will forward recommendations of the panel	15 (55)
	to Secretary ARMREB and he will process the case for CFA	
	approval.	
Sanction	• Secretary ARMREB issues a sanction letter to institute and	05 (60)
	asks to submit financial documents-	
	 Contingent Bill (FM/ARMREB-03) 	
	 ECS Mandate(FM/ARMREB-04) 	
	 Funding Pattern of the Institute 	
	Article of Association	
	• Institute will submit the documents to the Secretary ARMREB.	15 (75)
	• Secretary ARMREB will review the documents and forward it	10 (85)
	to PCDA.	10 (00)
	• PCDA will transfer the grant to institute and intimate the	15 (100)
	release of payment to Secretary ARMREB.	15 (100)
Settlement	•On completion of deputation, the institute will render a	60 days
of	deputation report including the technical documents related to	after
Accounts	the deputation activity along with the certificate that the	conclusion
	objectives of sending the scientist on deputation abroad have	of the
	been met and submit to Secretary ARMREB. It also includes	activity
	the settlement of accounts within thirty days after conclusion	
	of the activity.	

3.0 OTHER SANCTIONS

3.1 NORMS FOR AWARD OF HONORARIUM

- a) Honorarium of Rs 2,500/- is to be paid to Chairman special/adhoc committee.
- b) Honorarium of Rs 2,000/- is to be paid to non DRDO monitors/experts and invitees.
- c) In case of foreign participants to workshops/courses organised by ARMREB, invited lecturers could be paid a token honorarium per course/workshop/consultancy as per the norms of ARMREB and revised time to time. The payment in this regard would however be made in rupees only. Prior permission from Secretary ARMREB in this regard will have to be obtained before inviting foreign participants.

3.2 PROCEDURE FOR TA/DA CLAIM OF NON- OFFICIALS ATTENDING MEETINGS ETC

a) The TA/DA claim should be supported by invitation letter issued by the Secretary ARMREB/Panel Co-ordinator of the concerned research panel.

- b) Chairman ARMREB is authorised to travel by executive class of Air India. Panel Chairmen, non-DRDO Members, monitors, external experts and invitees are authorised to travel by lowest refundable economy class of Air India.
- c) Travel by airlines other than Air India would be governed by the existing guidelines of DGCA. Claim should be submitted along with air ticket and Boarding Pass. In case of travel by bus, original bus tickets may be enclosed and in case of travel by rail, rail ticket no., class of journey, train name and number should be mentioned in the claim/contingent bill.
- d) Non-officials are authorised for honorarium (in lieu of DA as per para 3.1)
- e) The claim should be submitted in triplicate with a revenue stamp affixed on the original copy.
- f) A copy of the advance taken should also be enclosed with the claim.
- g) Secretary ARMREB will countersign the bill and forward to PCDA through DMS.

3.3 SANCTION OF GRANTS TO CHAIRMAN OF RESEARCH BOARD/ PANELS AND SECRETARY ARMREB FOR ARMREB ACTIVITIES

- (a) Chairman ARMREB and Chairmen of each Research Panel are authorised for grant of Rs 3.0 lakh to incur the following expenditures. In case, the Chairman of Boards and Panel are not attached to any institution, they will open an account in the name of Boards/Panels with nomination of Secretary ARMREB.
 - (i) Out of the above grant, Rs 1.75 lakh has been catered for meeting the expenditure to conduct meetings including payment of TA and honorarium to non-officials/experts/invitees of the Panels.
 - (ii) Out of the above grant, Rs 1.25 lakh has been catered for the stationery cost, contingent expenditures, postage stamp, telephone/mobile (as per government rules), local transport for Board/Panel activities etc and hiring of contract services or payment of honorarium to existing staff of the institute for providing secretarial assistance.
 - (iii) Member Secretary of the Board is authorized to re-allocate the grant between (i) & (ii) sub-heads and amongst panels ensuring the overall ceiling of this grant to the Board (as per the number of panels) is not exceeded.
 - (iv) In case of requirement of additional grant, the same will be processed for concurrence and approval of CFA by the Member Secretary.
- (b) Rs 2.0 lakh allocated to Member Secretary under contingency head to meet local incidental expenditures of the respective Boards.
- (c) Honorarium of Rs 2500/-per meeting to be paid to the Chairman ARMREB and Research Panels. Honorarium of Rs 2000/- per meeting will be paid to non-officials, non DRDO members of the board/panels and experts. No separate DA will be admissible.
- (d) The Chairman ARMREB is entitled to travel by Executive Class in Air India. Other non officials are authorised to travel by Air India lowest refundable fare in economy class. In case, any exemption needed to travel by private airlines for the Board and Panels activities, non-official member will be required to obtain approval of DGCA or follow the laid down procedures of their respective institutions. In case of any other exemption, CFA approval is to be obtained in advance.

(e) Audited statement of account and utilization certificate to be submitted by Chairman of Board and Panels at the end of each financial year. In case, Chairman of Board and Panels is not attached to any institute, he will submit the same duly audited by a certified Chartered Accountant. The expenditure incurred for audit is to be paid from the contingent head.

4.0 PUBLICATION OF RESULTS/ PRESENTATION OF PAPERS

- a) Prior permission of the chairman of the respective panel should be obtained for publishing the results of projects sponsored under ARMREB, in Indian & foreign journals. The panel chairman, while granting the permission will endorse a copy to the Secretary ARMREB along with a copy of manuscript/abstract of the paper. The assistance rendered by the ARMREB will be acknowledged in the paper. Three copies of reprints of published papers will be sent Secretary ARMREB. For making any commercial use of the investigations carried out under Grants-in-Aid scheme, permission of the Secretary, ARMREB would be essential.
- b) If the investigation being carried out is of unclassified nature, the research fellow/assistant may register himself/herself for a research degree, with the prior approval of the chairman of the panel. In all such cases a copy of the thesis should be sent for prior approval to the chairman of the specialist panel before submitting the same to the university /institute concerned.
- c) Depending on the utility of the results obtained/software developed, the research panel may recommend for obtaining additional reprints for circulations to armament community in India and abroad. The expenditure incurred towards this may be reimbursed from the contingency grant under the project.

5.0 OWNERSHIP OF INTELLECTUAL PROPERTIES/PATENT RIGHTS

- (a) The ownership of any intellectual properties, generated by research performed under this grant, whether or not legally protected, shall vest in the grantee institution. The grantee institution shall promptly report to DRDO its intention to protect legally any such intellectual properties.
- (b) DRDO shall be deemed to have an irrevocable and royalty-free license to use such intellectual properties, whether or not legally protected, for such purposes as DRDO may decide, keeping the guarantee institution informed.
- (c) The grantee institution shall consult DRDO prior to contracting any agreement that envisages the use of such intellectual properties, whether or not legally protected, during or after the closure of the activities conducted through this grant. In any such agreement, the grantee institution shall declare that its ownership over the intellectual properties is encumbered to the extent of para (ii) of the sanction letter.
- (d) Neither DRDO nor the Government of India accept any liability for infringement, innocent or otherwise, by the grantee institution, or by the investigators of the intellectual or other right of third parties.

6.0 NORMS FOR TRANSFER OF TECHNOLOGY

- a) For consideration of the transfer of technology a TOT committee would be constituted by the Armament Research Board. This committee will consist of Chairman of the concerned panel, Co-ordinator, rep of user lab, PI of the project/rep of the institution developing the know-how and rep of ARMREB. Secretary ARMREB could nominate any other member in the committee, if considered desirable. ARMREB Secretariat will further progress the case.
- b) Based on the applications received after advertisement in the leading newspaper, the modalities of TOT will be worked out by the TOT Committee.
- c) The TOT could be affected through National Resource Development Corporation (NRDC) or any other agency approved by the Armament Research Board in consultation with Directorate of Industry Interface & Technology Management (DI²TM). In case the grantee developing the know-how has not got the infrastructure for TOT or does not intend to transfer technology through its own infrastructure. In such cases the royalties could be shared in the ratio of 30:35:35 between NRDC, ARMREB and the agency developing the know-how. In case the institution developing the know-how has got necessary infrastructure to transfer the technology, it could be transferred directly by the agency developing the know-how and in such cases the royalties would be shared equally between ARMREB and the grantee developing the know-how.
- d) For avoiding any legal actions arising out of non-payment of royalties by the technology acceptor, the royalties would be charged in lump sum in one or at the most two instalments, as decided by the board.
- e) If the processes / techniques / stores are to be utilised /produced for defence purposes, existing policy of DRDO would be adopted.

7.0 TERMINATION/ TRANSFER OF GRANTS

- a) The Armament Research Board reserves the right of termination of the grant at any stage, if convinced that the grant has not been properly utilised or appropriate progress is not made.
- b) In case of an investigator leaving the institution or going abroad etc, the executive authority of the institution to which the project has been sanctioned will ensure that the investigator submits a detailed report of the work done before he is relieved. All equipment/stores purchased must be properly accounted for and the ARMREB informed about the resignation etc of the investigator of the project/scheme. The institution will explore the possibility of continuing and bringing the project to a satisfactory logical conclusion under some other suitable investigator. Secretary ARMREB may also agree to the continuation of the project by the same investigator at his new institution on recommendations of Panel Chairman, if in his opinion, this will be in the best interest of the project, provided that the executive authority of the new institution also agrees to the continuation of the project and no new facility/infrastructure is demanded. In such a case, the former institution will transfer all the connected equipment/store purchased for the scheme, along with results achieved till that time, to the new Institution and audited statement of accounts.

8.0 PROCEDURE FOR RELEASE OF FOREIGN EXCHANGE

Grant would be paid to grantee institution in INR to the extent of FE by ARMREB. However, payment of FE is to be regulated by the rules of the respective institution.

9.0 PROCEDURE FOR PROJECTS INVOLVING STORAGE/ HANDLING & USAGE OF EXPLOSIVES

- a) All academic institutions/national laboratories other than Ministry of Defence Establishments have to comply with Indian Explosives Act 1884 and Explosives Rules 1940 framed there under and obtain clearances/ licences from Chief Controller Explosives, Nagpur before they carry out work on the project involving storage/handling and usage of explosives.
- b) In case the project involves only fundamental research work without use of any defence hardware, the institution/university/R&D organisation after obtaining clearances/ licences from CCE, Nagpur, will inform CFEES (Centre for Fire, Explosives and Environment Safety), Ministry of Defence, Metcalfe House, Delhi 110054 about the nature of work being undertaken. The grantee institution would insure compliance of all the statuary requirement and safety guidelines issued by the government.
- c) For projects involving handling and usage of explosives as an ingredient, which is to be supplied by one of the defence establishment to outside agencies other than Ministry of Defence Establishment, the outside agency will in the first instance approach CFEES for their views and recommendations. After getting clearance from CFEES, CCE, Nagpur should be approached for issuance of clearances/ licences as per rules, in force. However, it is advised that handling and usage of explosives should be avoided by outside agencies. This task can be assigned to the Armament Research & Development Establishment (ARDE), Pune, High Energy Materials Research Laboratory (HEMRL), Pune and TBRL, Chandigarh for the necessary testing on behalf of the investigators.

APPLICATION FOR GRANT OF RESEARCH PROJECT/SCHEME/FACILITY UNDER GRANTS-IN-AID SCHEME OFARMAMENT RESEARCH BOARD

		SI (To be completed	ECTIO by the			nvestigat	or)		
1		e of Research/Project Proposal ake the Title Concise & Specific)							
2	a)	Name of the Principal Investigator		:					
		Designation		:					
		Name of Institution		:					
		Address		:					
		Email :		:					
		Phone, Fax and Mobile Numbers		:					
	b)	Details of Co-Investigator		:					
3	i)	Proposed Duration of the Research/ Proposal	roject	:					
	ii)	Proposed Date of Commencement of Project/ Scheme/ Facility		:					
4	Am	ount of Grant Proposed for							
	Gra	nts	Ist Ye	ear		IInd Ye	ar	IIIrd Yea	ar
	(in ı	rupees)	IC		FE	IC	FE	IC	FE
	a)	Research Staff :							
	b)	Special Equipment (PCs not to be projected)							
	c)	Consumable Stores, Chemicals, etc							
	d)	Contingencies :							
	e)	TA/DA :							
	f)	Others (Please Specify) :							
		(in rupees)							
		Grand Total INR:					(FE)	•	

5	i)	Department of Institution where R&D		
J	' <u>'</u>	Project will be carried out		
	ii)	Other Departments, if any, which will co- operate in this project	:	
	iii)	Details of Financial Support sought/obtained from other agencies	:	
6	a)	Specific Aim of Project	:	
		(b) Objective of proposed work & intended applications to Armaments	:	
	c)	Summary of Proposed Research/ aaugmentation of facility with (Brief statement about the proposed investigation, its conduct and the anticipated results in not more than 200 words)	:	
	d)	Key Words	:	
	e)	Classification of the Project (Please state whether basic Research / Facility setup, Dissemination of Information, Process Development, Hardware Development, Study or Exploratory or Review of Investigation, Misc)	:	
7		Background and Justification (Basis for the Proposal with a brief Review of the state of the art in the subject, followed by an outline of the relevance and importance of the project in particular towards Research / Development / Design related to Armament Stores)	:	
8	a)	(a) Approach (Details of approach intended to be adopted in the execution of the Project/Facilities indicating how each of the Objectives listed in item 6(a) will be achieved)	:	
	b)	Bar Chart / PERT Chart indicating major Milestones may please be attached	:	
9		a) Facilities available to carrying out the proposed R&D work in the applicant's Institution (to be attached as Appendix). Describe the general facilities at your disposal .	:	

		(b) List major equipment which are essen available in your I	tial for this proje	nanent ect and	:				
		effective implem	red under project entation with cos sition duly suppor	t for st and	:				
		not available in institute and implementation	om Head of ins tems given at 9 any department required for ef of project and the ailable any time f	(c) are of the fective same					
10		Previous work done (to be attached as A briefly any work don- pertinent, to the prop	ppendix). Describ e that is particula	ре					
		(i) your personal pur related areas and	blications in this 8	&					
		(ii) personal publica	tion in other area	S					
11	Details in respect of Research Project/ facilities including augmentation of facilities currently being undertaken / likely to be undertaken by the PI and Co-Project Investigator from various sources including ARMREB (List all current Research support of the Investigator from ARMREB 8 other agencies)		:						
		Name of PI/Co-PI	Name of Sponsoring	Ag		Project/ cy / ties	Total Amount	Total Period of support with dates	
				га	CIII	แยร		From	То
PI									
СО	-PI								
12	Bio	graphical sketch of Inv	/estigator						
	a)	Name			:				

 			_					
b)	Designation		:					
c)	Age							
d)	Education and Experience	e	:					
	(i) Degrees conferred (be	egin with Bachelor De	egr	ee)				
	Degree	Institution		Field(s) Year				
	(ii) Other Research Train covered by this applic				y establishing Research qua present position.	lification in area		
	Institution	Na	am	e of W	ork Done	Year		

	e)	Fields of Major Scientific (interest in order of choice)	• •			
	f)	Any other addl information				
		SECTIO	N ·	В		
1.	Nar	me of Institution Submitting Application				
2.	Add	dress				
3.	Name, Designation and full address of the Official to whom payment/cheques are to be mailed			:		
	CERTIFICATE					

I have gone through the rules for Grants-in-Aid scheme of ARMREB and

- i) I agree to abide by the terms and conditions set forth for the Grants-in-Aid scheme of the Armament Research Board and certify that basic necessary facilities for the proposed work are available and the same will be extended to the investigator (s)
- ii) I certify that in case the present investigator is not available for any reason to continue the work on the project/facilities alternate arrangements will be made to employ suitable person/persons.
- iii) I certify that separate accounts will be kept for funds received from ARMREB and spent on the project/facilities and the same will be made available to the Auditors of this Institution and on demand, if required, to an Officer of the ARMREB Sectt.
- iv) I certify that grant has not been obtained or applied for the same purpose or activity from any other Ministry/Department of Government of India or state government.
- V) I certify that the information given above at serial number no. 01-12 is true to the best of my knowledge and nothing has been concealed.

Signature of the	Signature of the
Principal Investigator	Executive Authority of the Institution
Name :	Name :
Date :	Date :
Place:	Place :

FORMAT FOR TECHNICAL EVALUATION OF PROPOSALS SUBMITTED FOR FUNDING UNDER GRANT-IN-AID SCHEME OF ARMREB

Name of the Research Panel:								
1.	1. General Details:							
	Reference No with date							
	Title of proposal							
	Principal Investigator							
	Address							
	Email							
	Telephone No							
	Co-Investigator							
	Address							
	Principal Collaborator							
	Address							
	Name and address of evaluating panel member							
	Name							
	Designation							
	Address							

On the next four pages kindly give your evaluation along with justification / comments. (Please mark x in the relevant boxes)

2. Technical Evaluation:						
a) How far is the proposal relevant to the Armament Field?						
Fully Some extent Not at all						
Please elaborate in few sentences, if relevant:						
b) Does the proposal cover the frontier areas of science and technology topic, which is -						
Immediate application						
Potential relevance						
Futuristic Applications						
Please comment briefly:						
c) Categorize the proposal, Does it deals with (Tick as many applicable) -						
Entirely new or emerging topic						
Active area of current interest						
Technology known, but approach is different						
At best provides some additional study						
Trivial problem (Common Problems)						
Please comment briefly:						

3. Information about P1 & Institution::							
a) Are the expertise and experience of the PI and the Co PI adequate for the tasks involved in the proposed project?							
Yes	To a limited exten	t		No			
b) Are the infrastructor carrying out the property	ure facilities at the institutions of oject? To a limited exte		PI complementary	and will No	they help in		
Please give your comments for the same:							
4. Evaluation of propose	d budget : (Budget — Proper/ O	ver-estimated	/ Under-estimated)				
Equipment	:						
Staff	:						
Consumables	:						
Travel	:						
Others	:						
Please give Comments:							
5. Project Implementatio	n Approach :						
Is PDC adequate	e?		Yes	No			
Is the Bar chart	PERT Chart well defined?		Yes	No			
Are the mileston	es clearly defined?		Yes	No			

Give specific Comments:						
6. Overall Assessment:						
Are the expertise and experience of the PI and the Co PI adequate for the tasks involved in the proposed project?						
Is the research problem well defined?	Yes	To a large extent	No			
Are the goals properly envisaged?	Yes	To a large extent	No			
Please categorize the proposal: P	Priority	Acceptable	Not Acceptable			
Requires revision & reconsideration		Recommend to other p	anel, specify			
Do you recommend	project for san	ction in present form?				
Recommended		Recommended after m	nodifications			
Please elaborate :						
Signature of panel expert Date:						
Name & Designation Address						
Project Ref with Date:						

in lieu of I.A.F.A.- 115 (Small)

Vouche	r No.	/ARMREI	B/Grant-in-Ai	d/Tech. Act./	fe				115 (Small)
				CONTINGE	NT BILL				
Amount	t of Allo	tment				Rs		For use	official of the
Balance Expend	of allot iture on	ment excluding	g the amount of	f this bill	incurred by			ARMRE Secreta New D	B ariat
(i)	Month	s account in wh				<u>ion</u>			
Serial No.	Date		Details of	f Expenditure		Number of Quantity	r Rate Rs. P	Per	Amount Rs. P
		Claimed	on	account	of				
		mandate fo	rm and Sec						
		Total							
			vived on	(date)					
				` ′					
Not an		(:	D						
(11)	obtain to Cor that I	able and that th ntractors on run	e all receipts f ning accounts	for sum of Rs. 25/have been so desi	- and under, extroy, defaced m	cept as regar nutilated that	ds paym they car	ent made i not be use	n the M.E.S ed again and
(iii) (iv)	Certifi	ed that paymen	t of subsistence	e allowance was	in the interests	of service a	nd that t	he rejected	recruits for
the total	l amoun	t of the bill.				_	minent p	lace near t	o and above
Amount of Allotment Rs									
			Cou	intersigned by			Received	l Payment	
			Secretar	y ARMREB, DR	DO HQ,		of the gr	by financia antee insti e stamp wi	
Station:	:		Date:						

ELECTRONIC CLEARING SERVICE (CREDIT CLEARING)

(MANDATE FORM)

(INVESTOR / CUSTOMER'S OPTION TO RECEIVE PAYMENTS THROUGH CREDIT CLEARING MECHANISM)

			• /
	(Scher	me name and the perio	
			No.
1.	INVESTOR / CUSTOMER'S N	NAME :	
2.	PARTICULARS OF BANK AC	COUNT :	
	A. BANK NAME	:	
	B. BRANCH NAME	:	
	Address	:	
	Telephone	:	
	C. 9- DIGIT CODE NUM	BER OF THE BANK &	BRANCH :
	(Appearing on the MI	CR Cheque issued by t	he bank)
	D. ACCOUNT TYPE		:
	(S. B. Account / Curre	ent Account or	
	Cash Credit with code		
	E. LEDGER NO. / LEDG	,	
	F. ACCOUNT NUMBER	:	
	(As appearing on the	Cheque Book)	
	G. IFSC Code No. of the	• •	
of a ch particu		ngs bank passbook iss	ued by your bank for verification of the above
3.	DATE OF EFFECT		
in	transaction is delayed or information, I would not h	not effected at all fold the User institut	bove are correct and complete. If the or reasons of incomplete or incorrect ion responsible. I have read the option lity expected of me as a participant under ne.
			(
			Signature of the Custome
		Date:	Č
Certifie	d that the particulars furnished	above are correct as p	er our records.
		(Bank's Stam	p)
			(Signature of the Authorised
			Official from the Bank

GRANTS-IN-AID SCHEME: ARMAMENT RESEARCH BOARD PROFORMA FOR ANNUAL PROGRESS REPORT OF WORK DONE ON SANCTIONED PROJECTS

- NB-1: 10 copies of the annual report are required along with soft copies
- NB-2: The annual progress report will cover work done during the period or one calendar year or from the date of commencement of work to the end of calendar year in the case of newly sanctioned projects
- NB-3: Since additional funds required for subsequent years will be released only after assessing the work during the preceding year, this report should reach Secretary. Armament Research Board in January every year in order to facilitate timely release of funds.

1. Name and Designation of Investigator 2. Name and Address of Institution 3. Title of Project 4. Reference of Sanction Letter 5. Period for which sanctioned 6. Date of commencement of work (The project would be deemed to be operative with effect from the date funds are recd by the Institution) 7. Total amount sanctioned

Year	Research		Equi	pment		Travel	Contingencies	Others
	Staff	Capital		Consumable		(TA/DA)		
		IC	FE IC		FE			
1 st								
2 nd								
3 rd								

8. Statement of accounts certified by competent authority (Likely unspent balance at the time of expiry of the, period and the saving made, if any, under different heads should be clearly indicated)

Period	Grant Released (under different heads)	Expenditure incurred (under different heads)	Balance (under different heads)	Additional funds required in the following year (under different heads)
1	2	3	4	5
	Staff			
	Capital Equipment			
	Consumables			
	TA/DA			
	Contingencies			
	Others: Specify			
Total :				

9. Details of staff in position (indicating change, if any)

Year	Designation of Post (s) with pay as sanctioned	Name(c)	Qualifications & Experience	Date of appointment	Date of	Period for which employed	
1	2	3	4	5	6	7	

11. Details of visits, seminar, symposia etc attended within the country for the project related work

Signature of the Principal Investigator

Signature of the Executive Authority of the Institution (Registrar or any other designated Officer of the Institution)

12.	Certified that the funds received from ARMREB have not been utilised for any purpose other than what have been clearly indicated in the sanction. None of the staff members who are already receiving salary from the Institution have been paid by remuneration by way of consultancy fees								
	Signature of the	Signature of the	Signature of the						
	Principal Investigator	Accounts Dept	Executive Authority						
	Date	Date	Date						
	Date :		Name & Designation						
	PART- II								
1.	a) Aim of Project	:							
	b) Key Words	:							
	Classification of Project c) (See para 6(d) of Annexure I)	:							
2.	Complete resume of all the relevan available on work done on subject giving as Appendix A								
3.	A brief summary of work done and from the inception of the project til case of projects sanctioned prior to by this progress report). Pl give as	l date (only in the : the period covered							
4.	Detailed report of progress of work during the year covered by this rep technical report separately). For mo 15.3	ort (to be given as a							
5.	Further programme of work								
6.	Number of papers published with to journal & year of publication (till d								

STATEMENT OF ACCOUNTS, EXPENDITURE & UTILISATION CERTIFICATE

(STATEMENT OF ACCOUNTS)

Institute Reference	
Information on Grants-in-Aid project of Armament Research Board sanctioned to	:
1. Reference to ARMREB initial sanction	:
2. Project :Title	:
3. Name of Principal Investigator	:
4. Duration of the project, together with revisions in PDC, if any	:
5. Total Funds for the duration of the project including FE	:

(Re-appropriation of fund after PDC)									
Total amount sanctioned	Heads under which grant released		Year wise break up of funds		Date of sanction	Date of receipt		eipt	
(in lakhs)			Ist	IInd	IIIrd		Ist	IInd	IIIrd
1		2		3		4	5		
	Capital Eqpt								
	Staff								
	Consumables								
	TA/DA								
	Contingencies								
	Other heads								
	(PI specify)								
Total:									

6.	Original sanctioned cost in lakhs inclusive of	:	
	FE (Please indicate FE Amount in bracket)		
7.	Revised cost		Reasons for cost revision
	a	:	
	b		
	c		
	d		
8.	Original PDC		
9.	Revised PDC		Reasons for PDC revision
	a	:	
	b	:	
	c	:	
	d		

(STATEMENT OF EXPENDITURE)

Year	Salary/ Wages Allowa nces	Consum able Materia l	Capital E	quipment	TA/DA	Continge ncies	Any other heads	Total Expendi ture	Balance
			Indian	Foreign					
a	b	c	d	e	f	g	h	i	j
Total:									

Signature of the Executive Authority/ Head of the Institution		Signature of the PI	Signature of the Accounts Officer	Signature of the Audit Authority
Date :		Date :	Date :	Date :
* Full o	details of expenditure	under these heads are to be	furnished as annexure to this s	statement. The expenditure
under tl	nis head should tally w	ith the statement regarding dis	posal of Equipment.	
		<u>UTILISATION (</u>	<u>CERTIFICATE</u>	
1.	R.& D work on (Na Govt of India, (Title Board sanction letter of No. and date of the sate A sum of Rs	in favour of me of the Institution) of scheme) Ministry of Dementioned below : nction letter : interest accrued on the iven.	of Grants-in-Aid safence, Directorate of Armamo	for carrying out under under ents, Armament Research est not accrued justification was sanctioned and that the
2.	has been refunded to copy enclosed). It is further certified	that I have satisfied myself the d and that I have exercised no	nutilized at the end of the year format) MRO No. nat the conditions on which Greecessary check to see that the results of the property of the	and date (Original rant-in-Aid was sanctioned
	(5	Signature)		(Signature)
	Princip	oal Investigator	Executive	Authority of the Institution
	Place :		Place:	
				UNTERSIGNED CORRECT (Signature) IDIT AUTHORITY OF THE INSTITUTION
			Pla Da	

FM/ARMREB-07

DOCUMENT SHEET

PROJECT SPONSORED BY ARMAMENT RESEARCH BOARD	DOCUMENTATION	DOCUMENT SHEET CLASSIFICATION
Title	Document No.: Date of Issue :	
Author(s):	Contents:	
Division:	No. of Copies :	
External: Participation	Project No.:	
Sponsor:	Sponsor's : Project No.	
Approval:		
Remarks:		
Keywords:		
Abstract:		

EXECUTIVE SUMMARY OF PROJECT

1	Title of the Project	:		
2	Name of the PI		:	
3	Name of the Institution		:	
	Cost of the Project		Date of Sanction	Date of Completion
				1

- 1. Title of the Project
- 2. Name of the Principal Investigator
- 3. Name of the Institution
- 4. Cost of the project
- 5. Date of Sanction
- 6. Date of completion
- 7. Aim of the project
- 8. Requirement Envisaged
- 9. Achievements
- 10. Likely Application of the Outcome
- 11. Likely end use
- 12. Details of Equipment acquired under project (Attach as Appendix, if required)
- 13. No. of Research staffs engaged under the project
- 14 No. of students/researchers benefited under the project
- 15 No. of papers published in National conference under the project
- 16 No. of papers published in International conference under the project
- 17. No. of papers published under the project in National Journals with impact factor
- 18. No. of papers published under the project in International Journals with impact factor
- 19. No. of thesis for Ph.D/M.Tech realized under the project with details
- 20. No. of Patents development / sealed under the project
- 21. Steps taken by PI for dissemination and further follow up of research work
- 22. Suggestion, if any for further research work

PROFORMA FOR SUBMISSION OF PROPOSALS TO ARMAMENT RESEARCH BOARD FOR FINANCIAL SUPPORT FOR CONDUCTING SEMINAR / SYMPOSIUM / WORKSHOP / CONFERNCE

1.	Title	of the Symposium/Seminar/Conference:	:	
2.	a)	Department & Institution proposing the	:	
		Symposium/Seminar/Conference		
	b)	Other Departments/Agencies planned to be	:	
		associated for conducting		
	c)	Name of the agencies/Institutions from whom		
		financial support has been asked (also provide amount		
		asked) for the above Seminar/ Workshop /Conference		
3.	Prop	osed faculty / invitees		
1.	Scop	be and Objective of the proposal clearly bringing out		
	the n	eed to organize the Short Seminar/ Symposium		
	/Con	ference and the topics to be covered.		
5.	Impo	ortance of the topics to armament discipline	-	
5.	Like	ly participants (identify the organisations /who would		
	bene	fit from such symposium/seminar/conference) and the		
	expe	cted number of participants.		
7.	Dura	tion of the symposium/ seminar/ conference proposed		
	dates	s and venue.		
3.	a)	Detailed breakdown of cost indicating expenditure	:	
		under the following heads		
		(i) Seminar circulars/registration material etc	:	
		(ii) Printing of proceedings/lecture notes	:	
			-	

(iii) Working Lunch-/-Coffee / Tea	:
(iv) Contingencies for typing assistance/ postage/ transport etc. (Expenditure under each head to be identified).	:
(v) Others (Pease specify)	:
b) Detailed breakdown of income from Registration fee/ contributions/grants etc. from various agencies and the amount of grant requested from ARMREB	:
c) Order of preference under various heads	·
d) Payee in whose favour the cheque should be drawn	:
9. Number of vacancies being allotted to ARMREB without payment of registration fee	:
10 CERTIFICATE: "It is certified that funds for conducting the cannot be met from within the resources of the Institution"11. CERTIFICATE: "It is certified that financial support has not conducting the conducting that the conducting the conducting that the conducting the conduct	
Dte of ER & IPR, NRB, LSRB, and ARDB, DRDO HQ for the	ne above purpose.
Date :	Head of the Institution
Place:	
Notes:	
(i) Proposal should be made (03 hard along with softcopy) processing.	and submitted to Secretary, ARMREB for
(ii) The proposals should be submitted at least 3 months in a sent at least 6 months in advance. Request for security c should accompany the proposal along with the following	learance for visit to Defence R&D Estt., if required,

a)	Full Name(Expanding the Initials) :	
b)	Nationality	
c)	Date of Birth	
d)	Parentage	
e)	Permanent Address	
f)	Present Address	
g)	Passport Number, Date & Place of issue validity, if available	
h)	Occupation	
i)	Visa- Number, Date & Period of validity	
j)	Whether previously in India, if so, date and place of previous visit	
k)	Purpose & date of visit to the Estt / Lab and duration of visit	
1)	Purpose of visit to India and period of -stay in India	

^{*} Three sets of seminar proceedings/lecture notes would need to be sent to ARMREB Secretariat for record along with the list of participants)

^{*} Audited statement of expenditures and Utilization certificate would be submitted by the grantee Institution within one month after conduct of the Seminar / Symposium / conference.

PROFORMA FOR SUBMISSION OF PROPOSALS TO ARMAMENT RESEARCH BOARD FOR GRANTS-IN-AID FOR DEPUTATION ABROAD

1. Name of Person proposed to visit abroad	
2. Department & the Institution	
3. Purpose of Deputation (in case, deputation is for participation in a seminar/symposia/Conference, the title, venue and dates should be mentioned).	
4. Details of deputation abroad for the last five years with information on countries visited, duration, purpose & name of sponsoring agency.	
5. Country/countries to be visited and the duration of the deputation.	
6. Whether the deputation is linked with the activities of ARMREB Grants-in-Aid project(s). If so, name of the project, its current status and need for deputation vis-a-vis the project activities should be briefly outlined	
7. a) Whether presenting. a paper based on ARMREB project;	
b) Please also indicate the amount of registration fees & whether the organising committee has exempted payment of the above fees;	
c) Whether the paper to be presented has been cleared for publication by the co-ordinator of the concerned Research Panel of ARMREB. If so, please attach a copy of the communication in this regard;	
8. Benefit likely to accrue from the deputation;	
9. The total anticipated expenditure for the deputation with break up and the support likely to be provided by the parent	

	nstitution/Organisers of the symposium/ any other agencies		
lil	ke DST,CSIR, Industries etc;		
	mount of grant requested from ARMREB (Please give		
ae	etailed break up);		
ΡI	lace:		Signature of Applicant
			organical of Approvate
D	ate:		
	<u>CERTIFICATE</u>		
1.	Certified that the proposed expenditure of Rs		for deputation of
	Shri/Dr/Prof		-
	the resources of the Laboratory/Institute/University.		
2	certified that financial support has not been asked from any	other DDD	O Lab including Dto of ED & IDD
2.	NRB, LSRB, and ARDB, DRDO HQ for the above purpose	oulei DKL	O Lab including Die of ER & IFR,
	TARB, ESAB, and TARBB, BABO TQ for the above purpose		
3.	Only excursion fare has been included in the anticipated expe	enditure	
	or		
	Excursion fare is not available on this route.		
4.	The break-up of expenditure as per para 9 is as per Institute n	orms.	
			Signature of Head of the Institute
		Name:	
		Date:	

Note : Three hard copies along with soft copy of the proposal should be submitted to Secretary ARMREB so as to reach at least three months in advance for national and 6 months in advance for International events.

Format for submission of account at end of financial year by Chairman Boar/panels

Reference

STATEMENT - 1

1. Authority - sanction letter Number and date :

2. Purpose :

3. Name of Board/Panel Chairman :

4. Total amount received :

5. Financial Year :

STATEMENT - 2

(STATEMENT OF EXPENDITURE)

(Amount in Rupees)

Year	Honorarium/ Wages of Staff engaged for secretarial assistance	TA/ honorarium (in lieu of DA)	Contingencies	Any Other Heads	Total Expenditure incurred	Balance
1	2	3	4	5	6	7

Certificate

It is further certified that I have satisfied myself that the conditions on which Grants-in-Aid was sanctioned have been duly fulfilled and that I have exercised necessary check to see that the money actually utilized for the purpose it was sanctioned.

Signature of the Executive Authority with official Seal

Date:

Signature of the Audit Authority with official Seal

Date:

UTILIZATION CERTIFICATE

It is certified that grants for a sum ovide letter No	of Rs/- has been sanctioned
certified that out of the total funds received, purpose it was sanctioned and remaining ur	during the financial year
was sanctioned have been duly fulfilled and money was actually utilized for the purpose i	sfied myself that the conditions on which Grants-in-Aid that I have exercised necessary check to see that the t was sanctioned. mount paid reasons for the same may be given to mee
the audit requirement.	mount paid reasons for the same may be given to mee
(Signature with Official seal) Board/Panel Chairman Place:	(Signature with official Seal) Financial Authority Place:
Date :	Date :
со	UNTERSIGNED
(Signature of Aud	it Authority with Official Seal)
Place	,
Dale	

FORM G.F.R 19

Assets acquired wholly or substantially out of Govt grants register maintained by grantee institution block account maintained by sanctioning authorities.

Name of sanctioning authority

S No	Name of grant ee institu tion	No & Date of sanct ion	Amoun t of grant sanctio ned	Brief purp ose of the grant	It any condition regarding the right of ownership of Govt. in the property or other assets acquired out of the grant was incorporat ed in the grants in aid sanction	ed	Value of the assets as on	Purpose of which utilized at present	Enc umb ered or not	Reaso n if encum bered	Disp osed or not	Rea son and aut hori ty of disp osal	A m ou nt re ali ze d on di sp os al	Rema rks
1	2	3	4	5	6	7	8	9	10	11	12	13	1 4	15

It is certified that necessary check has been applied and that the inventory has been found to be in order.

(Signature with official seal)

(Principal Investigator)	(Executive Authority of the Institute)
	(Audit Authority of the
Institute)	

Date : Place :

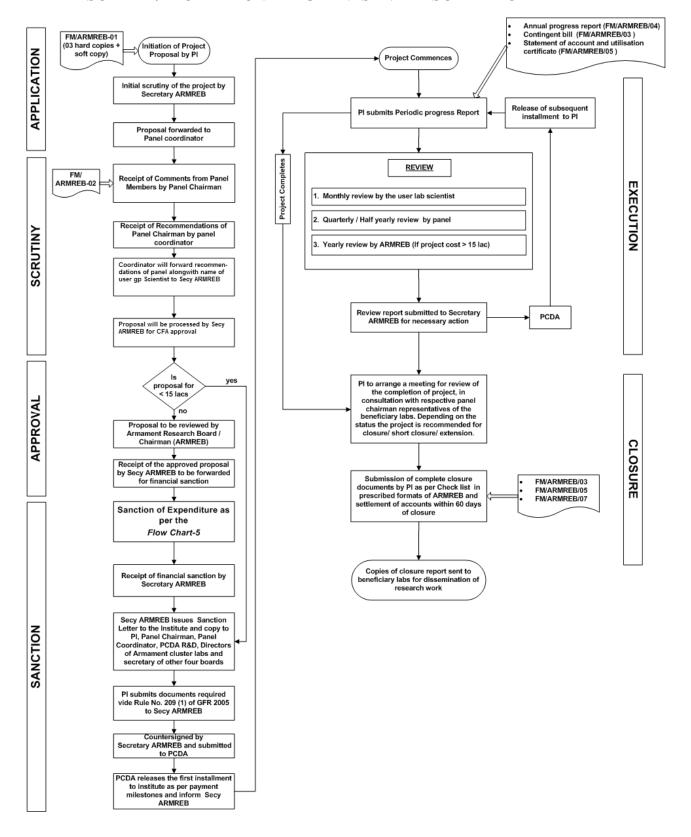
In lieu of IAFA - 507 MILITARY RECEIVABLE ORDER

The officer In-charge of the Treasury

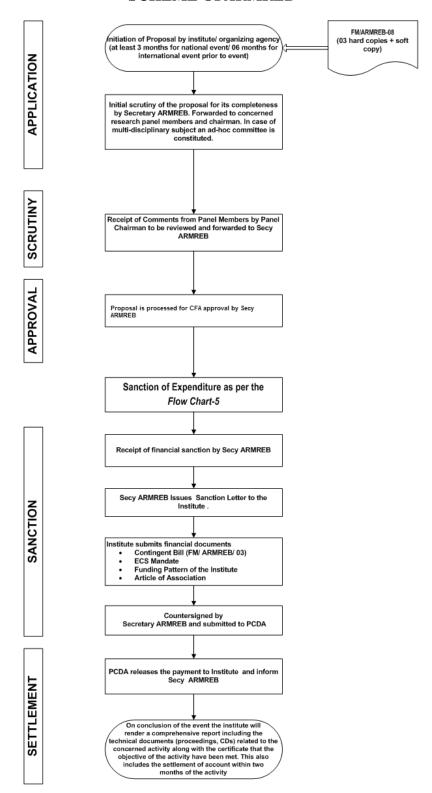
Reserve Bank of India/State Bank of India

Please receive from, for order the su (only) on account of refund of unspent am sanctioned to and credit the amount Departmental Receipt pertaining the PCDA (R&D), New Delhi Code No. 40	ount of the project unt under Defence
Description: Refund of unspent amount of project titled "sanctioned to vide project letter no under Grant-in-Aid scheme of ARMREB.	
Forwarded to PCDA(R&D), West Block `5', RK Puram, New Delhi with reference for Rs for settlement of	
Place : Signature of to Dated :	he Issuing Officer
II	
Treasury Reserve Bank of India/SBI Receipt No.	
dated Received the sum of Rs	
(Rupees)
Signature Treasury Bank with Seal	

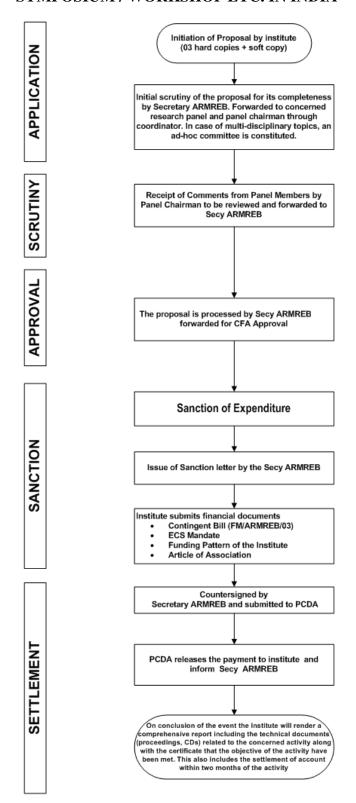
PROCESS FLOW CHART FOR SANCTION OF RESEARCH PROJECT/ SCHEME/FACILITY UNDER GRANTS-IN-AID SCHEME OFARMREB



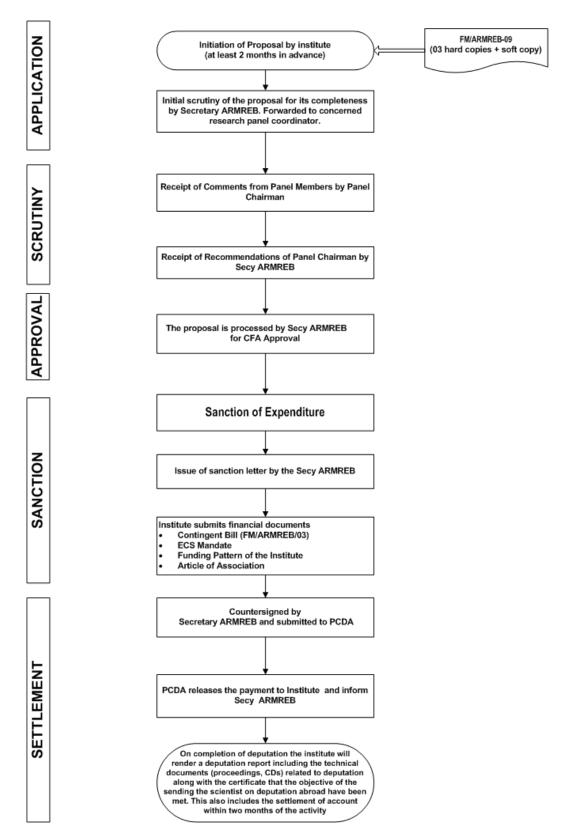
PROCESS FLOW CHART FOR SANCTION OF GRANT FOR CONDUCTING SEMINAR / SYMPOSIUM / WORKSHOP / SHORT COURSES ETC. UNDER GRANTS-IN-AID SCHEME OFARMREB



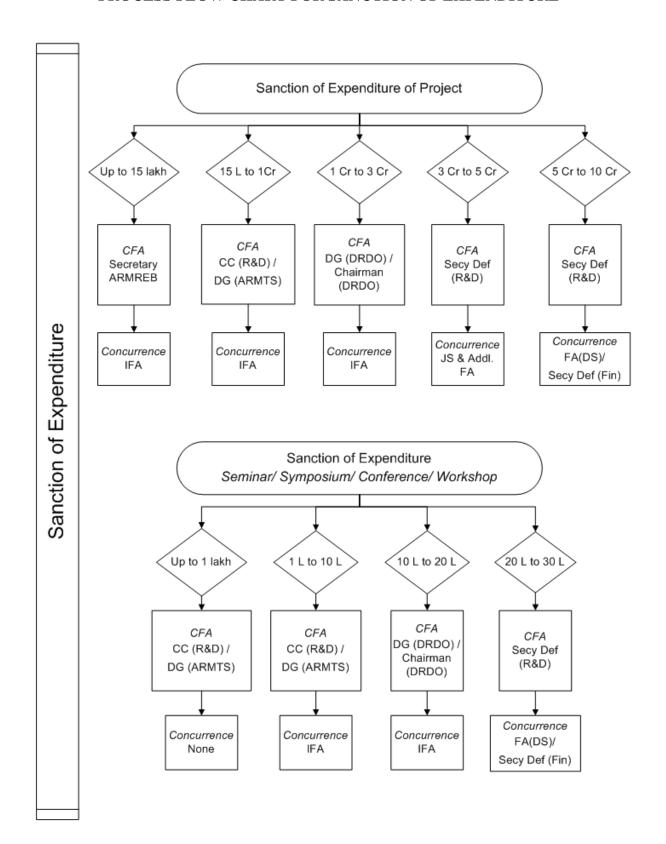
PROCESS FLOW CHART FOR SANCTION OF GRANT FOR INVITING EMINENT SCIENTIST/ENGINEERS FROM ABROAD TO ATTEND CONFERENCES/ SEMINAR / SYMPOSIUM / WORKSHOP ETC. IN INDIA



PFC/ARMREB-04 PROCESS FLOW CHART FOR SANCTION OF GRANT FOR DEPUTATION ABROAD



PROCESS FLOW CHART FOR SANCTION OF EXPENDITURE



Page **50** of **53**

GUIDELINES FOR PROJECT REVIEW

- Date of sanction, amount sanctioned and PDC
- Literature survey indicating national / international status
- > Theoretical / practical work carried out
- Milestones defined and achieved at the time of review & future plan
- ➤ Validation of the R&D findings
- Percentage of work completed
- **B**ottlenecks, if any
- Any mid course correction required on approach previously defined
- Confidence factor on completion of work
- Requirement of PDC/cost revision, if necessary
- Whether any modification is needed for effective implementation?
- Activity chart for remaining period
- **Expenditure** statement
- Paper published/reported to reputed journal with impact factor
- Work leading to M Tech/PhD thesis of students, if any
- Patent likely to realize, if any

ABBREVIATIONS

ACE Armament & Combat Engineering

ADMB Armament Design Mechanism & Ballistics

ARDE Armament Research & Development Establishment

ARMREB Armament Research Board

ASE Armament Sensors & Electronics

CC Chief Controller

CCE Chief Controller Explosives

CDSW Combustion Detonics & Shock Waves

CFA Competent Financial Authority

CFEES Centre for Fire, Explosives And Environment Safety
DRDO Defence Research & Development Organisation
ER & IPR Extramural Research & intellectual Property Rights

FA Financial Adviser

FM Formal

HEM High Energy Materials

HEMRL High Energy Materials Research Laboratory

HOD Head of Department
IF Integrated Finance

IISc Indian Institute of Science
IIT Indian Institute of Technology

ISRO Indian Space & Research Organisation
MAA Materials for Armament Applications

MOC Memorandum of Collaboration
MOU Memorandum of Understanding

NRDC National Research Development Corporation

OFB Ordnance Factory Board

PCDA Principal Controller Defence Accounts

PDC Probable ate of Completion

PFC Process Flow Chart
PI Principal Investigator

PXE Proof & Experimental Establishment

R & D Research & Development

SOC Statement of Case

TBRL Terminal Ballistics Research Laboratory

TOT Transfer of Technology

Project proposals are invited throughout the year.

Address for Correspondence and submission of proposals:

S K Rastogi Secretary ARMREB 307, DRDO Bhavan Rajaji Marg New Delhi - 110011

Phone: 23007307, FAX: 23794562 Email: sudhish_r@hotmail.com, skrastogi@hqr.drdo.in

Website: http://www.drdo.gov.in/drdo/English/index.jsp?pg=armreb.jsp